

Application No. 10/645,409
Amendment Dated April 20, 2006
Reply to Office Action of January 20, 2006

REMARKS/ARGUMENTS

By this Amendment, Claims 1, 4, 7, 10, 13 and 17 have been amended and Claims 21 – 24 added. Thus, Claims 1 - 24 are now pending in this application.

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

In Office Action of January 20, 2006 the examiner has rejected Claims 1, 2, 7 and 8 under 35 U.S.C. 102(e) as being anticipated by Richards et al. (4,669,473). Claims 10 - 12 were rejected under 35 U.S.C. 102(e) as being anticipated by Kensey (4,890,612). Claims 3 - 6 and 9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Richards et al. Claims 13-20 were rejected under 35 U.S.C. 103(a) as being obvious over Kensey in view of Richards et al.

For the reasons as set forth hereinafter it is respectfully submitted that the claims now pending in this application are patentable over the cited prior art.

The device of the Richards et al. patent is a fastener for securing tissue together and not for sealing an opening in a blood vessel. The examiner has apparently recognized this fact but concluded that the structure of Richards et al. could be used for the purpose set out in the preamble to Claims 1 and 7. In particular, the examiner has taken the position that “the introductory statement of intended use (e.g., ‘for introduction into an incision and for sealing an opening in the wall of a blood vessel with inner and outer surfaces’) has been carefully considered but deemed not to impose any structural limitations on the claims patentably distinguishable over the device of Richards et al. which is capable of being used as claimed if one desires to do so.”

Application No. 10/645,409
Amendment Dated April 20, 2006
Reply to Office Action of January 20, 2006

It is respectfully submitted that the examiner's position effectively nullifies the language of the preamble of the claims, which in this case gives life and meaning to those claims. Moreover, Claims 1, 4 and 7 have been amended so that their respective preambles lend further life and meaning to the claimed elements and the claimed elements themselves have been further amended to more clearly distinguish over the Richards et al. patent.

For example, Claim 1 has been amended to state in the preamble that the vessel has a preexisting hollow interior. The body of the claim has been amended to specify that: (1) the occlusion element is arranged to be inserted through the sheath into and through the opening in the wall of the blood vessel for disposition within the preexisting hollow interior of the blood vessel; (2) the occlusion element does not serve to form the preexisting hollow interior of the blood vessel; and (3) the retaining thread is further arranged to apply force to the occlusion element to cause the engagement of the occlusion element with the inner wall surface of the blood vessel while the occlusion element remains within the preexisting hollow interior of the blood vessel. These features are not even remotely suggested in the Richards et al. patent. Independent Claims 4 and 7 have been similarly amended.

As will be appreciated by those skilled in the art, the elements 15, 315, 615, etc. in Richards et al. which form the fastener's head by their very nature and operation create the hollow space in which they are located. In particular, when any of the fasteners of Richards et al. is inserted into the tissue to be secured and the fastener's head rotated to hold it in place, such action creates the space shown in the drawing wherein the fastener's head resides (see Col. 4, line 55 to Col. 5, line 6 describing this action). In contradistinction the space in which the occlusion element of Claims 1 and 7 or the second resorbable segment of Claim 4 resides and

Application No. 10/645,409
Amendment Dated April 20, 2006
Reply to Office Action of January 20, 2006

remains in place when closing the opening in the wall of the blood vessel is the preexisting hollow interior of that blood vessel, a hollow space that the device of the subject invention had no part in creating.

Thus, it is respectfully submitted that Claims 1, 4 and 7, and each of their dependent claims is patentable over the art of record.

With respect to Claims 10 - 12, it is respectfully submitted that the rejection based on the Kensey patent is untenable. In this regard, the examiner has contended that "Kensey discloses ... a spreadable occlusion element (106) constructed and arranged to be inserted into an incision and directed to seal an opening in the wall of the blood vessel . . . and a locking element (106) arranged to be slidably mounted on the retaining thread . . ." Clearly element 106 cannot be both the occlusion element and the locking element as asserted by the examiner. It is believed that the examiner is contending that the occlusion member is the toggle or holding member 106 and the locking member is the sealing member 102.

With respect to Claim 1, this claim has been amended to make it clear that the locking element is separate from the occlusion element, a feature not found in the Kensey patent. In the device of that patent the toggle or holding element 106 and the sealing member 102 form a unit and move as a unit through the percutaneous puncture into the blood vessel, from whence both (the unit) are retracted so that the toggle 106 engages the inner wall of the blood vessel and the sealing member 102 is located outside the blood vessel wall.

Accordingly, it is respectfully submitted that Claim 10 is patentable over the Kensey reference.

Application No. 10/645,409
Amendment Dated April 20, 2006
Reply to Office Action of January 20, 2006

With respect to Claim 11, this claim calls for the occlusion element to be spreadable.

Clearly toggle element 106 is not a spreadable member.

With respect to Claim 12, it is clear that the sealing member 102 is not arranged to be moved over the retaining thread toward and adjacent the outer wall of the blood vessel and into cooperative relation with said occlusion element as set forth in Claim 12. Rather as clearly disclosed in the Kensey patent not only do the occlusion element and the sealing element move as a unit, the thread 104 also moves with the occlusion element and the sealing element when they are moved toward the blood vessel during the sealing procedure. Thus, it is respectfully submitted that Claim 12 is patentable over the art of record.

Independent Claims 13 and 17 are each drawn to a method of sealing an incision and an opening in a blood vessel. These claims have been amended in a manner similar to the amendment of Claims 1, 4 and 7. Thus, for the same basic reasons as given with respect to those claims, it is respectfully submitted that independent Claims 13 and 17 and the claims depending therefrom are allowable over the art of record.

New Claims 21 - 24 have been added and claim the combination of a blood vessel of a living being and a closure assembly. Since the Richards et al. patent admittedly fails to disclose or suggest the use of its device to seal an opening in a vessel wall, it cannot be deemed to be a viable reference against Claims 21 - 24, which claim the combination of the vessel and the closure. Moreover, the closure as specified in these combination claims is respectfully submitted as being not disclosed in the Kensey reference.

Application No. 10/645,409
Amendment Dated April 20, 2006
Reply to Office Action of January 20, 2006

For at least the reasons set forth above, it is respectfully submitted that the above-identified application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are respectfully requested.

Should the Examiner believe that anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

CAESAR, RIVISE, BERNSTEIN,
COHEN & POKOTILOW, LTD.

By

Barry A. Stein, Esq.
Registration No. 25,257
Customer No. 03000
(215) 567-2010
Attorneys for Applicants

April 20, 2006

**Please charge or credit our Account
No. 03-0075 as necessary to effect
entry and/or ensure consideration
of this submission.**